

Title (en)
ELECTROCHEMICAL PRODUCTION OF SYNTHESIS GAS FROM CARBON DIOXIDE

Title (de)
ELEKTROCHEMISCHE HERSTELLUNG VON SYNTHESSEGAS AUS KOHLENDIOXID

Title (fr)
PRODUCTION ÉLECTROCHIMIQUE DE GAZ DE SYNTHÈSE À PARTIR DE DIOXYDE DE CARBONE

Publication
EP 2598670 A4 20140625 (EN)

Application
EP 11813111 A 20110727

Priority

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- US 2011045534 W 20110727

Abstract (en)
[origin: US2011114504A1] A method for electrochemical production of synthesis gas from carbon dioxide is disclosed. The method generally includes steps (A) to (C). Step (A) may bubble the carbon dioxide into a solution of an electrolyte and a catalyst in a divided electrochemical cell. The divided electrochemical cell may include an anode in a first cell compartment and a cathode in a second cell compartment. The cathode generally reduces the carbon dioxide into a plurality of components. Step (B) may establish a molar ratio of the components in the synthesis gas by adjusting at least one of (i) a cathode material and (ii) a surface morphology of the cathode. Step (C) may separate the synthesis gas from the solution.

IPC 8 full level
C25B 3/00 (2006.01); **C25B 3/25** (2021.01)

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Citation (search report)

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